Decorative Industrial Plating, LLC
2531 N. Dodge Avenue
Helena, MT 59601
(406) 449-6626
(406) 442-6591 (Fax)
www.dipitnow.com

Finishes
Nickel - Copper - Chrome - Brass
24k Gold and Oil - Rubbed Bronze

Owners
Paul and Beckie Graham

Shop Manager
John Sanderson

January 20, 2020

Pretreatment Coordinator
Engineering Division
Public Works Department
316 N. Park Avenue
Helena MT 59623

Dear Pretreatment Coordinator:

Please find enclosed our TOMP and TTO Certification Statement along with our Industrial User Monitoring Report Form for the Fourth quarter of 2019. Also enclosed is the analytical report and supporting documentation from Alpine Analytical.

If you have any questions or need further information please contact me at 449-6626.

Sincerely,

Paul Graham
Owner/Member

Enclosure Monitoring Report
Alpine Analytical Report
TOMP
TTO Certification Statement

Toxic Organic Management Plan
Industrial User Discharge Permit No: DIP005

Decorative Industrial Plating, LLC
2531 Dodge Avenue
Helena MT 59601

I. **Purpose and Scope**

The purpose of the plan is to identify sources of toxic organics in the facility wastewater and describe controls necessary to insure that these chemicals are not intentionally or accidentally discharged in the facility wastewater system. A Baseline Monitoring Report (BMR) has been submitted which contains TTO information. Refer to Attachment A for the toxic organic list.

A. **Process Description**

Decorative Industrial Plating, LLC (DIP) is a job shop electroplater performing copper, nickel, brass, gold and chrome plating operations. The electrolytic rinse tank is the only tank that is drained into the sanitary sewer system. This tank is the first step in the plating process. A slow flow of water enters and leaves this tank continually during plating operations. A flow meter on the tank is monitored and indicates a monthly discharge of 3,000 - 4,000 gallons. The pH is monitored daily as required by the industrial use permit.

B. **Identification of Toxic Organic Chemicals Entering the Plant Wastewater**

There are no toxic organic compounds used that are discharged into the sanitary sewer system.

C. **Inventory of Toxic Organics used at the Facility**

Methylene Chloride

DIP occasionally uses a paint stripper to remove paint from small parts prior to sandblasting and cleaning. This paint strip (Atotech 1540) contains methylene chloride (CAS-No 75-09-2) according to the MSDS.

D. **Methods of disposal**

DIP has not disposed of any 1540 paint stripper. DIP contracts with Mountain States Environmental Services, Billings MT to dispose of any hazardous materials.

E. **Existing administrative controls to prevent leaks or accidental discharges of toxic organics**

A small amount (approximately 20 gallons) is kept in a heavy plastic 55 gallon drum which the parts are set in. The drum is located inside a 500 gallon open top tank that is lined with a heavy PVC liner. The drum is covered at all times.

F. **Toxic Organic Management Plan**

Employees who use the paint strip process have been trained on how to properly handle this product for safety and environmental reasons. The shop owner has checked on replacing the stripper with one containing no toxic organic compounds. There are currently three possible alternatives. If an alternative product is found the existing stripper will be disposed of by approved methods using Mountain States Environmental Services.

II. **Certification**

TTO Certification Statement

Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation [or pretreatment standard] for total toxic organics (TTO) I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since filing of the last discharge monitoring report . I further certify that this facility is implementing the toxic organic management plan submitted to the City of Helena.

Signature of Representative: Paul Graham

Company: Decorative Industrial Plating, LLC

Name & Title of Representative: Paul Graham, Owner/Member

Date of Signature: 1-20-20

Appendix A
TOTAL TOXIC ORGANICS LIST

Volatile Comp'ds (EPA Method 624)

1. Acrolein
2. Acrylonitrile
3. Benzene
4. Bromoform
5. Carbon tetrachloride
6. Chlorobenzene
7. Chlorodibromomethane
8. Chloroethane
9. 2-chloroethylvinyl ether
10. Chloroform
11. Dichlorobromomethane
12. 1,1-dichloroethane
13. 1,2-dichloroethane
14. 1,1-dichloroethylene
15. 1,2-dichloropropane
16. 1,3-dichloropropylene
17. Ethylbenzene
18. Methyl bromide
19. Methyl chloride
20. Methylene chloride
21. 1,1,2,2-tetrachloroethane
22. Tetrachloroethylene
23. Toluene
24. 1,2-trans-dichloroethylene
25. 1,1,1-trichloroethane
26. 1,1,2-trichloroethane
27. Trichloroethylene
28. Vinyl chloride

Acid compounds (EPA Method 625)

29. 2-chlorophenol
30. 2,4-dichlorophenol
31. 2,4-dimethylphenol
32. 4,6-dinitro-o-cresol
33. 2,4-dinitrophenol
34. 2-nitrophenol
35. 4-nitrophenol
36. p-chloro-m-cresol
37. Pentachlorophenol
38. Phenol
39. 2,4,6-trichlorophenol

Base/Neutral s (EPA Method 625)

40. Acenaphthene
41. Acenaphthylene
42. Anthracene
43. Benzidine
44. Benzo(a)anthracene
45. Benzo(a)pyrene
46. 3,4-benzofluoranthene
47. Benzo(ghi)perylene
48. Benzo(k)fluoranthene
49. bis(2-chloroethoxy)methane
50. bis(s-chloroethyl)ether
51. bis(2-chloroisopropyl)ether
52. bis(2-ethylhexyl)phthalate
53. 4-bromophenyl phenyl ether
54. Butylbenzyl phthalate
55. 2-chloronaphthalene
56. 4-chlorophenyl phenyl ether

57. Chrysene
58. Dibenzo(a,h)anthracene
59. 1,2-dichlorobenzene
60. 1,3-dichlorobenzene
61. 1,4-dichlorobenzene
62. 3,3-dichlorobenzidene
63. Diethyl phthalate
64. Dimethyl phthalate
65. Di-n-butyl phthalate
66. 2,4-dinitrotoluene
67. 2,6-dinitrotoluene
68. Di-n-octyl phthalate
69. 1,2-diphenylhydrazine (as azobenzene)
70. Fluroranthene
71. Fluorene
72. Hexachlorobenzene
73. Hexachlorobutadiene
74. Hexachlorocyclopentadiene
75. Hexachloroethane
76. Indeno(1,2,3-cd)pyrene
77. Isophorone
78. Naphthalene
79. Nitrobenzene
80. N-nitrosodimethylamine
81. N-nitrosodi-n-propylamine
82. N-nitrosodiphenylamine
83. Phenanthrene
84. Pyrene
85. 1,2,4-trichlorobenzene

Pesticides (EPA Method 608)
86. Aldrin
87. Alpha-BHC
88. Beta-BHC
89. Gamma-BHC
90. Delta-BHC
91. Chlordane
92. 4,4'-DDT
93. 4,4'-DDE
94. 4,4'-DDD
95. Dieldrin
96. Alpha-endosulfan
97. Beta-endosulfan
98. Endosulfan sulfate
99. Endrin
100. Endrin aldehyde
101. Heptachlor
102. Heptachlor epoxide
103. PCB-1242 (Arochlor 1242)
104. PCB-1254 (Arochlor 1254)
105. PCB-1221 (Arochlor 1221)
106. PCB-1232 (Arochlor 1232)
107. PCB-1248 (Arochlor 1248)
108. PCB-1260 (Arochlor 1260)
109. PCB-1016 (Arochlor 1016)
110. Toxaphene

Total concentration of all quantifiable values greater than 10 micrograms for compounds 1 thru 110 shall not exceed 2,130 ug/l.

The list of Priority Pollutants included herein is taken from Federal NPDES Permit regulation 40 CFR Part 122, Appendix D, Table

City of Helena Wastewater Treatment Facility
2108 Custer Avenue East
Helena, MT 59602
(406) 457-8555

Industrial User Monitoring Report Form

Name of Business: **Decorative Industrial Plating** Permit Number: **DIP005**
Address: **2531 Dodge Avenue**
Contact Person Name: **Paul Graham, Owner** Alternate: **John Sanderson, Manager**
Telephone No. **406-449-6626**

Reporting Period: **Quarter** 4th **Year** 2019

Please complete the following table, and include laboratory results for each parameter analyzed.

Pollutant Parameter	Daily Max (mg/l)	Monthly Average (mg/l)	Analytical Results in mg/l	Sample Date
Arsenic	**0.01**	**0.006**	.002	12-12-19
Cadmium – T	**0.11**	**0.07**	<.0005	
Chromium – T	**2.77**	**1.71**	.010	
Chromium III	**2.36**	**1.46**	.001	
Chromium VI	**0.41**	**0.25**	.009	
Copper –T	**3.38**	**2.07**	.065	
Cyanide – T	**1.20**	**0.65**	<.05	
Lead – T	**0.69**	**0.43**	.002	
Mercury	**0.25**	**N/A**	<.0006	
Molybdenum	**1.28**	**N/A**	.001	
Nickel – T	**3.98**	**2.38**	.028	
Selenium	**0.95**	**N/A**	.001	
Silver – T	**0.43**	**0.24**	<.001	
Zinc – T	**2.61**	**1.48**	.056	

Process Water

Beginning Meter Reading 399570 **Ending Meter Reading** 416010

(Beg – End) = HCF: HCF X 748 = gallons **Total gallons discharged** 16,440

4160 10

pH must be maintained between 5.5 and 10.5 **Month** Dec **Year** 19

DATE	pH	DATE	pH	DATE	pH
1		12	No Flatw	23	9.5
2	8.6	13	9.3	24	9.8
3	8.3	14		25	
4	8.9	15		26	
5	8.7	16	9.5	27	
6	No Flatw	17	9.1	28	
7		18	8.9	29	
8		19	9.4	30	No Flatw
9	8.5	20	10.0	31	No Flat
10	8.3	21			
11	8.9	22			

Incidences of Non-Compliance and Corrective Actions Taken

Was Non-Compliance experienced this reporting period? Yes ____ No ✓

If yes, describe non-compliance ____

Corrective Action Taken: ____

Analytical data attached (Y/N) Y **Hauled Waste (Y/N)** N

If yes attach copy of manifest

Certification Statement *(must be signed by authorized representative)*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment for knowingly or negligently submitting false or misleading information.

Signed: Paul Graham Date and Time: 1-3-20 3:00 pm

Printed Name: Paul Graham

Self-monitoring Reports are due by the 28th of the month following the reporting period. Industrial Users submitting reports more than 30-days late are considered in Significant Non-Compliance and will be subject to enforcement by the City of Helena.

pH must be maintained between 5.5 and 10.5 **Month** Nov. **Year** 19

DATE	pH	DATE	pH	DATE	pH
1	9.1	12	8.9	23	
2		13	8.5	24	
3		14	9.2	25	9.1
4	8.9	15	8.9	26	8.7
5	9.4	16		27	9.2
6	8.7	17		28	
7	8.6	18	9.4	29	
8	8.9	19	8.9	30	
9		20	9.1	31	
10		21	8.4		
11	9.1	22	8.8		

Incidences of Non-Compliance and Corrective Actions Taken

Was Non-Compliance experienced this reporting period? Yes _____ No ✓

If yes, describe non-compliance _____

Corrective Action Taken: _____

Analytical data attached (Y/N) Y **Hauled Waste (Y/N)** N

If yes attach copy of manifest

Certification Statement *(must be signed by authorized representative)*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment for knowingly or negligently submitting false or misleading information.

Signed: Paul Graham Date and Time: 12/4/19 9:07 AM

Printed Name: Paul Graham

Self-monitoring Reports are due by the 28th of the month following the reporting period. Industrial Users submitting reports more than 30-days late are considered in Significant Non-Compliance and will be subject to enforcement by the City of Helena.

399570

pH must be maintained between 5.5 and 10.5 **Month** OCT **Year** 19

DATE	pH	DATE	pH	DATE	pH
1	8.1	12		23	9.1
2	8.1	13		24	9.5
3	9.7	14	9.6	25	NO Flow
4	9.4	15	9.4	26	
5		16	9.1	27	
6		17	8.9	28	9.6
7	9.4	18	9.3	29	9.0
8	9.3	19		30	9.2
9	8.8	20		31	9.0
10	9.0	21	9.1		
11	9.2	22	8.8		

Incidences of Non-Compliance and Corrective Actions Taken

Was Non-Compliance experienced this reporting period? Yes _____ No ✓

If yes, describe non-compliance _____

Corrective Action Taken: _____

Analytical data attached (Y/N) Y **Hauled Waste (Y/N)** N

If yes attach copy of manifest

Certification Statement *(must be signed by authorized representative)*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment for knowingly or negligently submitting false or misleading information.

Signed: Paul Graham Date and Time: 10-3-19 10:30 AM

Printed Name: Paul Graham

Self-monitoring Reports are due by the 28th of the month following the reporting period. Industrial Users submitting reports more than 30-days late are considered in Significant Non-Compliance and will be subject to enforcement by the City of Helena.

Alpine Analytical Laboratory

1315 Cherry, Helena, MT 59601
(406)449-6282

Case Narrative

On December 12, 2019, one water sample was received by our laboratory for analysis. The chain of custody indicated the sample was to be analyzed for Total Metals, Hexavalent Chrome and Total Cyanide. The sample was received cool and intact and hand delivered.

Results are summarized on the following page.

Should you have any questions regarding this analysis feel free to give us a call at 449-6282 or 800-814-6282.

We appreciate the fact that you have chosen us as your analytical lab.

Sincerely yours,

Chris Erickson
Laboratory Manager

Alpine Analytical Laboratory

1315 Cherry, Helena, MT 59601
(406)449-6282

Client: **D.I.P**

Date Reported: 17-Dec-19

Sample ID: **End of Line**
Project ID: None Given
Temp: 16.4°C

Chain of Custody No.: 29554

Laboratory ID: 26N182
Sample Matrix: Water

Date / Time Sampled: 12-Dec-19 @ 10:30
Date / Time Received: 12-Dec-19 @ 10:45

Parameter	AR	PQL	Analyzed Date/Time	By	Method Reference
Arsenic Total, mg/L	0.002	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Cadmium Total, mg/L	<0.0005	0.0005	17-Dec-19 @ 10:07	CE	EPA 200.8
Chromium Total, mg/L	0.010	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Chromium III, mg/L	0.001	0.001	17-Dec-19 @ 10:07	CE	Calc
Chromium VI, mg/L	0.009	0.001	12-Dec-19 @ 15:57	CE	EPA 200.8
Copper Total, mg/L	0.065	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Lead Total, mg/L	0.002	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Mercury Total, mg/L	<0.0006	0.0006	17-Dec-19 @ 10:07	CE	EPA 200.8
Molybdenum Total, mg/L	0.001	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Nickel Total, mg/L	0.028	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Selenium Total, mg/L	0.001	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Silver Total, mg/L	<0.001	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Zinc Total, mg/L	0.056	0.001	17-Dec-19 @ 10:07	CE	EPA 200.8
Total Cyanide, mg/L	<0.05	0.05	17-Dec-19 @ 14:57	CE	SM 4500CN C

Comments:
ND - None Dectected
PQL - Practical Quantitation Limit
NA - Not Applicable

References:
EPA-Methods for Chemical Analysis of Water and Wastes, US EPA, 600/4-79-020
SM-Standard methods for the Examination of Water and Wastewater, APHA/AWWA/WEF, 18th ed

Reviewed by: CE

Alpine Analytical Laboratory

1315 Cherry, Helena, MT 59601
(406)449-6282

QUALITY CONTROL DATA - WATER ANALYSIS

Date Reported: 17-Dec-19

Laboratory ID: QC06 / QC07
Condition: Intact

Parameter	Analytical Result	True Value	Range	Method Reference
Arsenic Total, mg/L	0.099	0.100	0.085 - 0.115	EPA 200.8
Cadmium Total, mg/L	0.085	0.100	0.085 - 0.115	EPA 200.8
Chromium Total, mg/L	0.103	0.100	0.085 - 0.115	EPA 200.8
Copper Total, mg/L	0.090	0.100	0.085 - 0.115	EPA 200.8
Lead Total, mg/L	0.090	0.100	0.085 - 0.115	EPA 200.8
Mercury Total, mg/L	0.0015	0.0020	0.0018 - 0.0023	EPA 200.8
Molybdenum Total, mg/L	0.088	0.100	0.085 - 0.115	EPA 200.8
Nickel Total, mg/L	0.097	0.100	0.085 - 0.115	EPA 200.8
Selenium Total, mg/L	0.515	0.500	0.325 - 0.625	EPA 200.8
Silver Total, mg/L	0.105	0.100	0.085 - 0.115	EPA 200.8
Zinc Total, mg/L	0.097	0.100	0.085 - 0.115	EPA 200.8

Parameter	Blank Result	Analytical Result	Duplicate Result	% Difference
Arsenic Total, mg/L	<0.001	0.002	0.002	0.0%
Cadmium Total, mg/L	<0.0005	<0.0005	<0.0005	NA
Chromium Total, mg/L	<0.001	0.010	0.010	0.0%
Copper Total, mg/L	<0.001	0.065	0.065	0.0%
Lead Total, mg/L	<0.001	0.002	0.002	0.0%
Mercury Total, mg/L	<0.0006	<0.0006	<0.0006	NA
Molybdenum Total, mg/L	<0.001	0.001	0.001	0.0%
Nickel Total, mg/L	<0.001	0.028	0.028	0.0%
Selenium Total, mg/L	<0.001	0.001	<0.001	NA
Silver Total, mg/L	<0.001	<0.001	<0.001	NA
Zinc Total, mg/L	<0.001	0.056	0.056	0.0%

Comments:
NA - Not Applicable
References:
Methods for Chemical Analysis of Water and Wastes, US EPA, 600/4-79-020

Reviewed by: CE

Alpine Analytical Laboratory

Chain of Custody

29554

1315 Cherry Ave. Helena, MT 59601
(406) 449-6282
www.alpineanalytical.com

Invoice to:	Report To: (If different than invoice)
DIP	
Address: 2531 Dodge	Address:
City: Helena State: MT Zip: 59601	City: State: Zip:
Phone: 406 449-6626	Phone:
e-mail: paul@dipitnow.com	e-mail:
Send Via: Mail ☑ e-mail ☐ Pick-up ☐	Send Via: Mail ☐ e-mail ☐ Pick-up ☐
Report: Yes ☐ No ☐	Copy of Invoice: Yes ☐ No ☐

Project ID:
Site ID: Paul Graham
Sampler (print): Paul Graham
Sampler (signature):

Sample Identification	Sample Date	Sample Time	Type Grab	Type Comp	Matrix	Number of Containers	Analysis Requested: See Attached	Comments	Lab use only LAB ID
End of Line	12/12/19	10:30 am	X			2	✓		20182

Relinquished by: Paul Graham — Date: 12/12/19 — Time: 10:45A
Received by: Dave — Date: 12/12/19 — Time: 1045

Temperature Received °C / Condition Received

Shipped: FEDEX ☐ UPS ☐ MAIL ☐ HAND DELIVERED ☒ BUS ☐

Remarks:

** An additional cost may be incurred for samples disposed of by *Alpine Analytical Laboratory*.

** An additional weekend cost may be incurred for samples that are read back on a weekend or a Holiday. (ex. Total Coliform, Fecal Coliform, BOD, etc.)

City of Helena Wastewater Treatment Facility
2108 Custer Avenue East
Helena, MT 59602
(406) 457-8555

Industrial User Monitoring Report Form

Name of Business: **Decorative Industrial Plating** Permit Number: **DIP005**
Address: **2531 Dodge Avenue**
Contact Person Name: **Paul Graham, Owner** Alternate: **John Sanderson, Manager**
Telephone No. **406-449-6626**

Reporting Period: **Month**_____ **Year**_____

Please complete the following table, and include laboratory results for each parameter analyzed.

Pollutant Parameter	Daily Max (mg/l)	Monthly Average (mg/l)	Analytical Results in mg/l	Sample Date
Arsenic	**0.01**	**0.006**		
Cadmium – T	**0.11**	**0.07**		
Chromium – T	**2.77**	**1.71**		
Chromium III	**2.36**	**1.46**		
Chromium VI	**0.41**	**0.25**		
Copper –T	**3.38**	**2.07**		
Cyanide – T	**1.20**	**0.65**		
Lead – T	**0.69**	**0.43**		
Mercury	**0.25**	**N/A**		
Molybdenum	**1.28**	**N/A**		
Nickel – T	**3.98**	**2.38**		
Selenium	**0.95**	**N/A**		
Silver – T	**0.43**	**0.24**		
Zinc – T	**2.61**	**1.48**		

Process Water

Beginning Meter Reading_____ **Ending Meter Reading** _____

(Beg – End) = HCF: HCF X 748 = gallons **Total gallons discharged**_____